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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,935	06/20/2006	Guy Deneuvillers	13415/203014	9902

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EXAMINER

FISHER, ELANA BETH

ART UNIT	PAPER NUMBER
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3733

MAIL DATE	DELIVERY MODE
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04/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,935	Applicant(s) DENEUVILLERS ET AL.	
	Examiner ELANA B. FISHER	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/24/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings are done by hand and are therefore not as clear as the applicant is capable of providing. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.
2. Additionally, not all of the numbers that label parts of the invention and subsequently presented in the figures are properly disclosed and defined within the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 26, 27 and 35 recite the limitation "lateral shoulders" in the first, second, and second lines of the claims, respectively. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 31 recites the limitation "tapering shape" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 22-33, 35, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Zucherman et al. (U.S. Publication 2001/0016743).

a. Regarding claim 22, Zucherman et al. disclose an intervertebral support comprising a spacer (702) and retaining means (710, 712, 714, 716), and being constituted by an anterior zone (708) suitable for being positioned between the laminae of the vertebrae, having the function of restoring an anatomical intervertebral spacing, and a posterior zone (706) comprising retaining means (710, 712) having the function of preventing the support from migrating towards the anterior portion of the spine by pressing against the lamina.

b. Regarding claim 23, the retaining means (710, 712) of the posterior zone (706) are lateral shoulders set back from the anterior zone and suitable for being received against the laminae of the vertebrae as close as possible to the articular facets.

c. Regarding claim 24, the retaining means (710, 712) of the posterior zone (706) are constituted by two transverse projections.

d. Regarding claim 25, the anterior zone (708) is provided with grooves (see diagram provided).

e. Regarding claim 26, the lateral shoulders (710, 712) are of small area being of the type having symmetrically-opposite projecting bulges (see diagram provided) set back from the anterior zone (708) and suitable for releasing movement of the vertebral articular facets.

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f. Regarding claim 27, the anterior zone (708) is provided with grooves (see diagram provided), and the lateral shoulders (see diagram provided) have a height that does not exceed the height of the posterior zone (706) of the support, and are narrow in width.

g. Regarding claim 28, the posterior zone (708) is capable of dampening movements between two adjacent vertebrae.

h. Regarding claim 29, the posterior zone (706) comprises a bottom face (718) that is capable of bearing on the top portion of the process at the bottom of the region fitted with the implant.

i. Regarding claim 30, the posterior zone (706) is prismatic in shape (see diagram provided) and has a height that corresponds to the spacing between adjacent vertebrae, presenting at least one rounded corner (see diagram provided) with the top face of the posterior zone (706) being triangular in shape (see diagram provided), which makes it capable of receiving the junction point formed by the lamina and the processes.

j. Regarding claim 31, the tapering shape (see diagram provided) of the posterior zone (706) allows freedom of movement between the top face of the spacer (702) and the process above the region fitted with the implant.

k. Regarding claim 32, the posterior zone (706) presents a top surface and a bottom surface (see diagram provided) that are flared to the anterior end (708) of the spacer (702), tapering progressively towards the posterior ends of the surfaces, and capable of receiving the junction point formed by the lamina and the process.

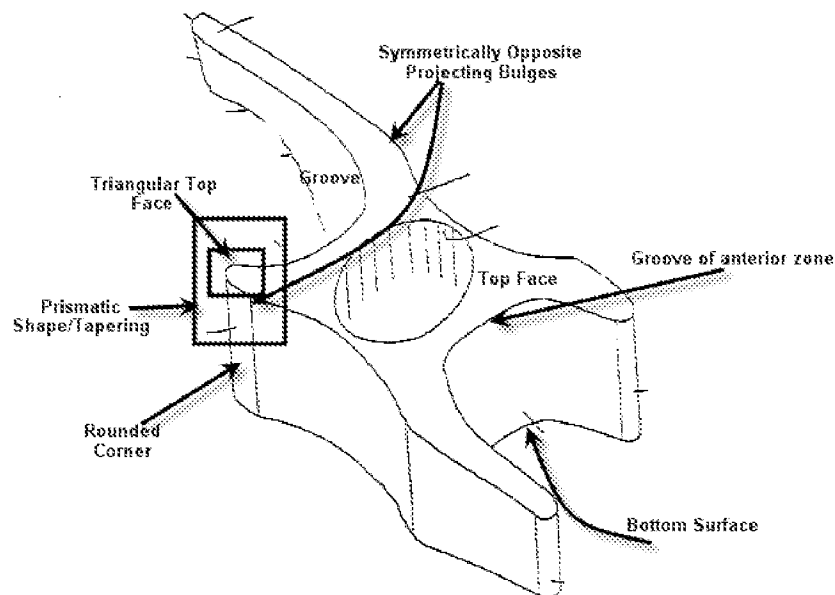
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l. Regarding claim 33, the core of the posterior portion (702) is pierced by a through recess (704), enabling the flexibility of the implant to be increased.

m. Regarding claim 35, the vertical portions of the lateral shoulders (710, 712) in contact with the lamina present respective concave zones extending and tapering towards the posterior lateral zone (706).

n. Regarding claim 42, the top face of the posterior zone (706) presents a shallow groove (see diagram provided) extending lengthwise in its middle and suitable for coming into contact with the process above the region fitted with the implant.

Regarding the above claims, see figure 74 and the diagram provided below.

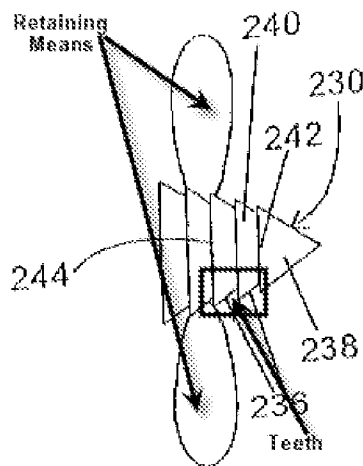


8. Claims 22 and 34 rejected under 35 U.S.C. 102(b) as being anticipated by Zucherman et al. (U.S. Publication 2001/0016743).

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- a. Regarding claim 22, Zucherman et al. disclose an intervertebral support comprising a spacer (244) and retaining means (side wings; see diagram provided), and being constituted by an anterior zone (238) suitable for being positioned between the laminae of the vertebrae, having the function of restoring an anatomical intervertebral spacing, and a posterior zone (236) comprising retaining means (240) having the function of preventing the support from migrating towards the anterior portion of the spine by pressing against the lamina.
- b. Regarding claim 34, the core of the posterior portion (236) carries teeth spaced apart by furrows (see diagram provided), and opposed to each other in pairs on the bottom and top faces, enabling the flexibility of the assembly to be varied.

Regarding the above claims, see figure 36 and the diagram provided below.

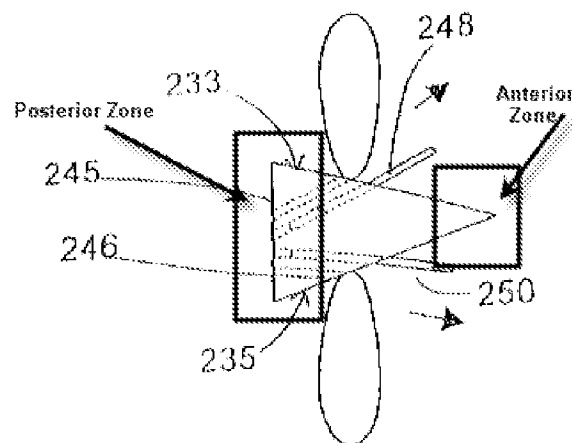


9. Claims 22 and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Zucherman et al. (U.S. Publication 2001/0016743).

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- a. Regarding claim 22, Zucherman et al. disclose an intervertebral support comprising a spacer (233) and retaining means (side wings; see diagram provided), and being constituted by an anterior zone (see diagram provided) suitable for being positioned between the laminae of the vertebrae, having the function of restoring an anatomical intervertebral spacing, and a posterior zone (see diagram provided) comprising retaining means (233, 235) having the function of preventing the support from migrating towards the anterior portion of the spine by pressing against the lamina.
- b. Regarding claim 40, the support further includes additional retention means constituted by ligaments (248, 250) crossing in the center of the implant, and holes (245, 246) extending vertically for passing the ligaments.
- c. Regarding claim 41, the support further includes additional retaining means constituted by independent ligaments (248, 250) passing through the full height of the support.

Regarding the above claims, see figure 37 and the diagram provided below.



Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zucherman et al. (U.S. Publication 2001/0016743) as applied to claim 22 above.

a. Regarding claim 36, Zucherman et al. disclose a support according to claim 22 above, however fail to disclose the material of the posterior zone (706).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to for the posterior zone (706) to be made of silicone having hardness lying in the range 40 to 80 on the Shore A scale, allowing freedom of movement in the region fitted with the implant, and flexibility in order to relieve lordosis, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

b. Regarding claim 37, Zucherman et al. disclose a support according to claim 22 above, however fail to disclose a material covering the posterior zone (706). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a biocompatible knit fabric covering at least part of the posterior zone (706), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability

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for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

c. Regarding claims 38-39, Zucherman et al. disclose a support according to claim 22 above, however fail to disclose the material of the anterior zone (708). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the anterior zone (708) to be made of a rigid biocompatible material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELANA B. FISHER whose telephone number is (571)270-3643. The examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571)272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elana B Fisher/
Examiner, Art Unit 3733

/Eduardo C. Robert/
Supervisory Patent Examiner, Art Unit 3733

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